



CRC for
Water Sensitive Cities



Australian Government
Department of Industry,
Innovation and Science

Business
Cooperative Research
Centres Programme

water utilities of the future

Australian's experience
in starting the transition

watersensitivecities.org.au



**Our future cities can fuel our prosperity and
improve our in quality of life**

FUTURE

Challenges

Climate variability and
change Population growth &
urbanisation Economic and
institutional constraints

TODAY

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FUTURE

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Challenges

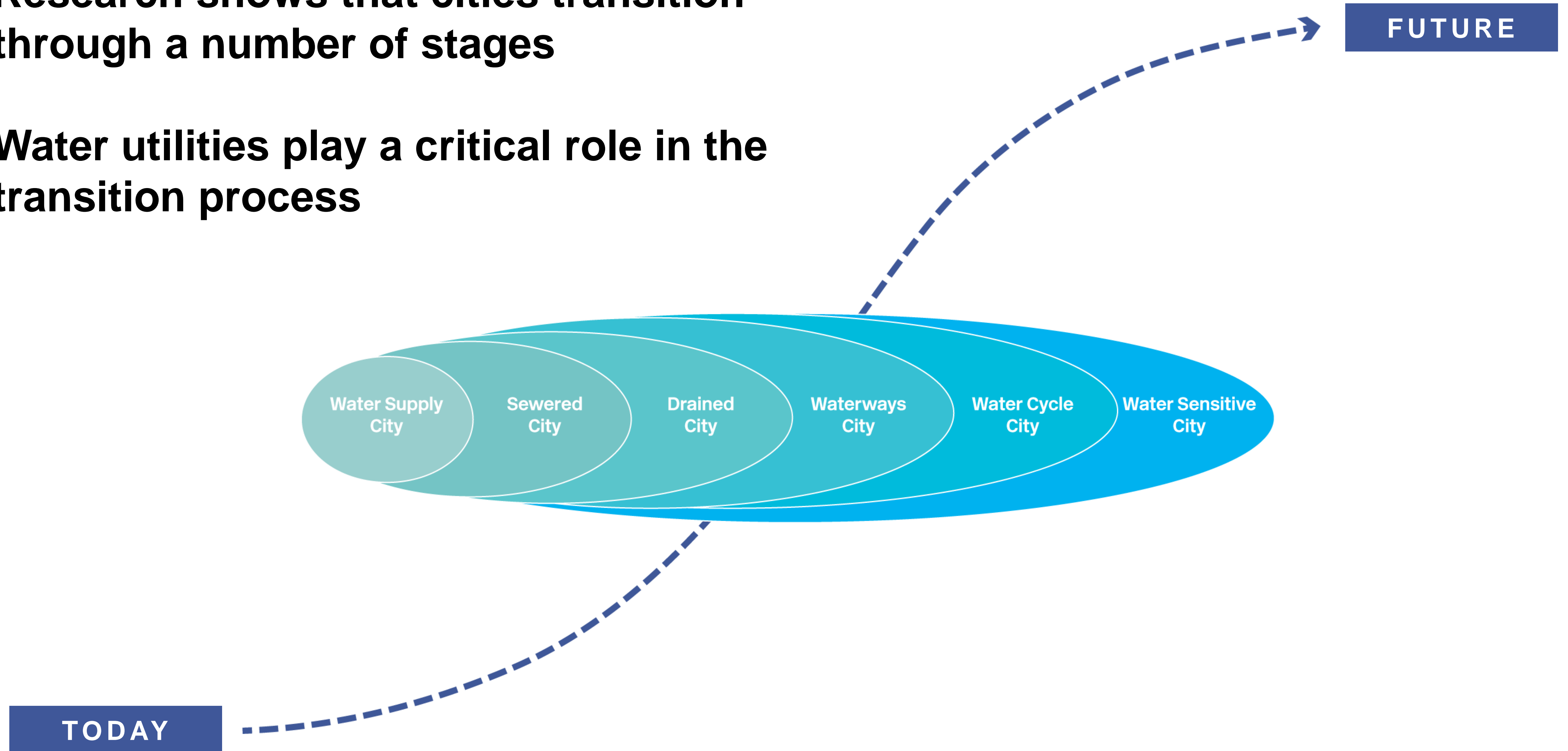
Climate variability and
change Population growth &
urbanisation Economic and
institutional constraints

FUTURE

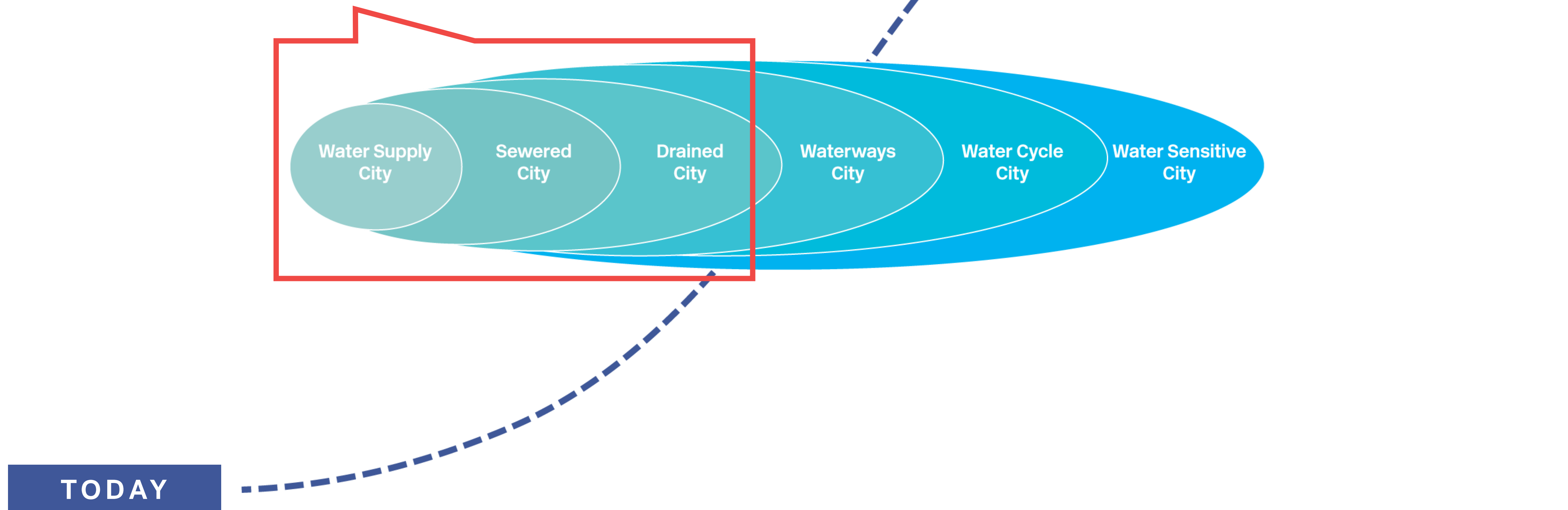


Research shows that cities transition through a number of stages

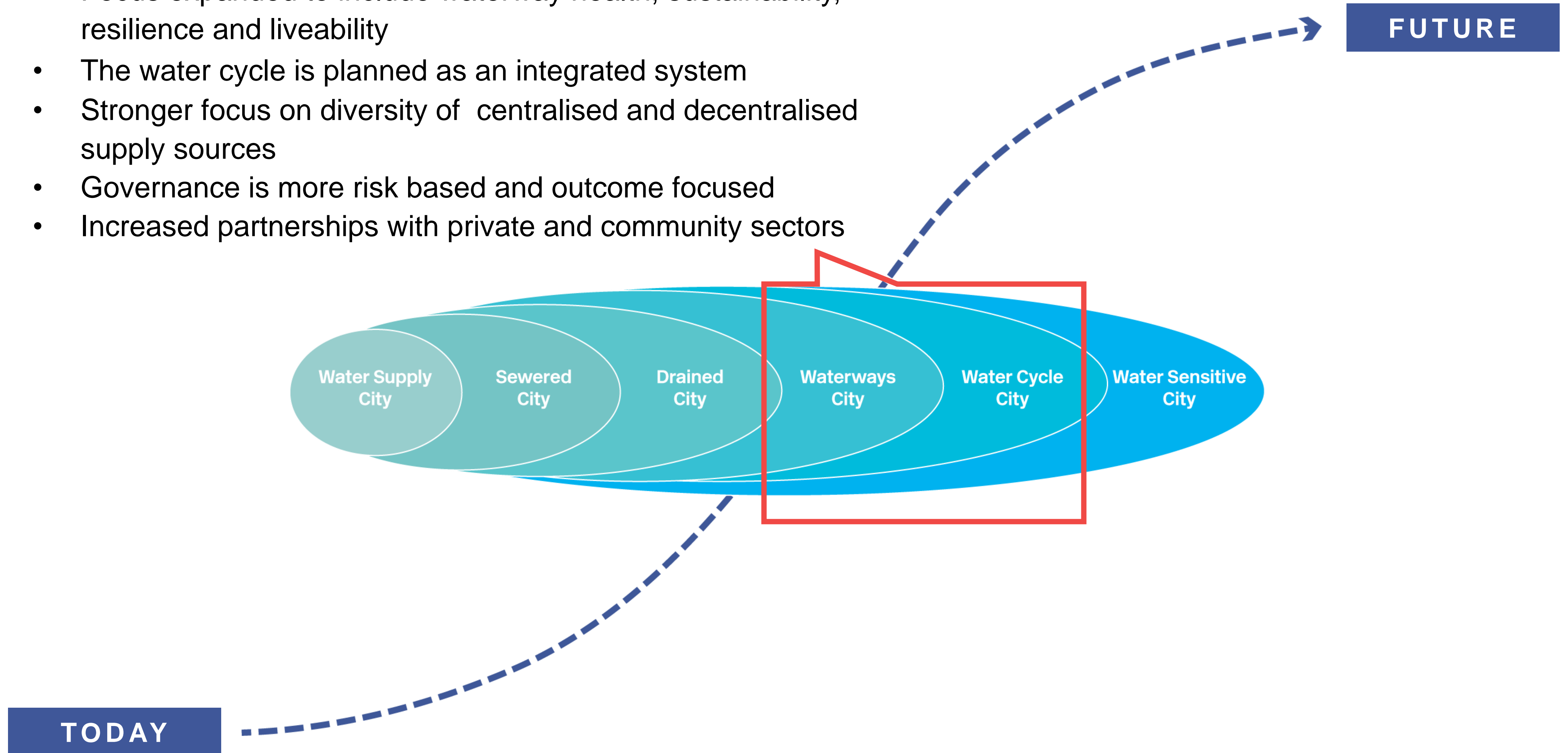
Water utilities play a critical role in the transition process



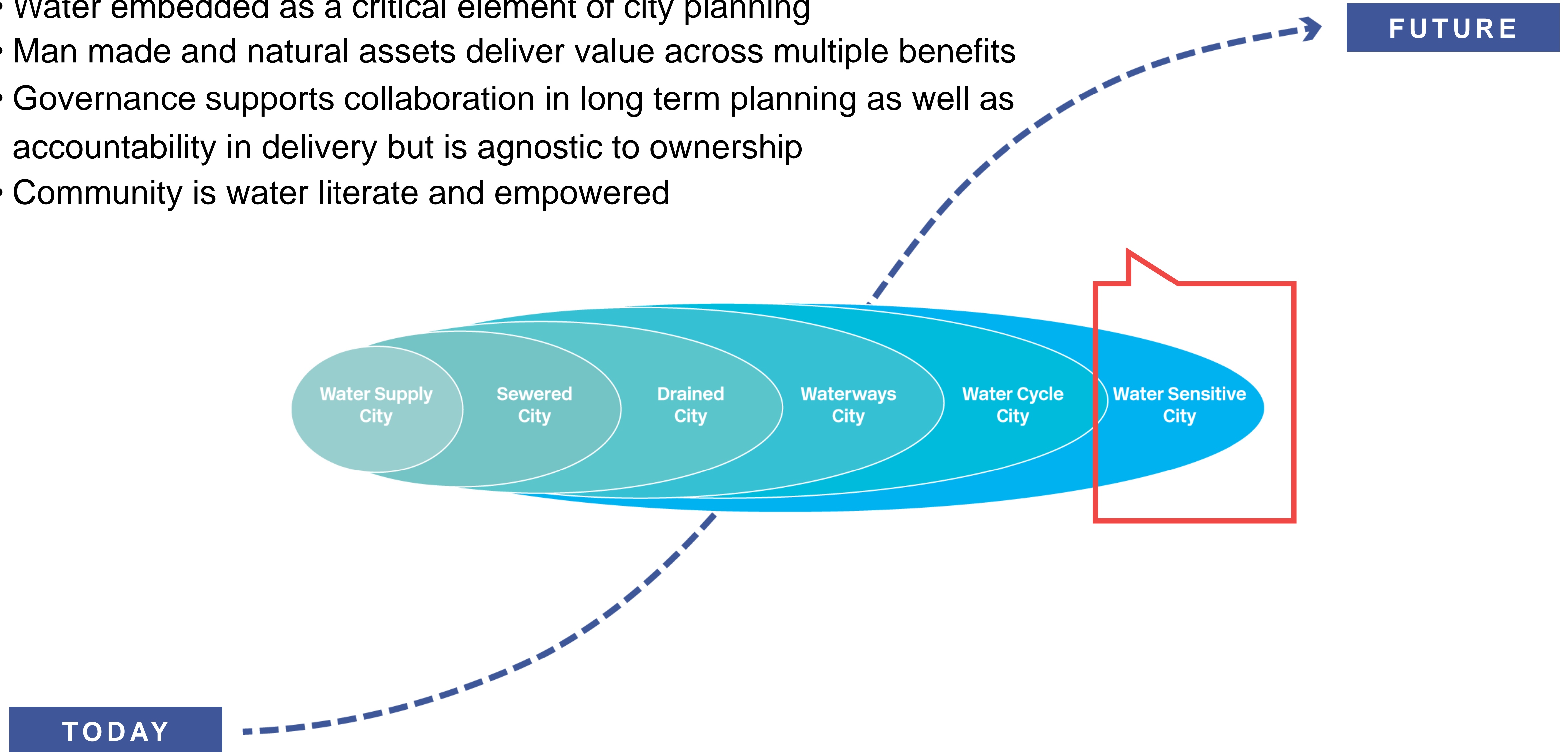
- Public health is a key driver
- Centralised, publicly owned, utilities providing reliable supply
- Governance is often top down, siloed and compliance driven
- Low community engagement and water literacy
- Private sector supports publicly owned utilities



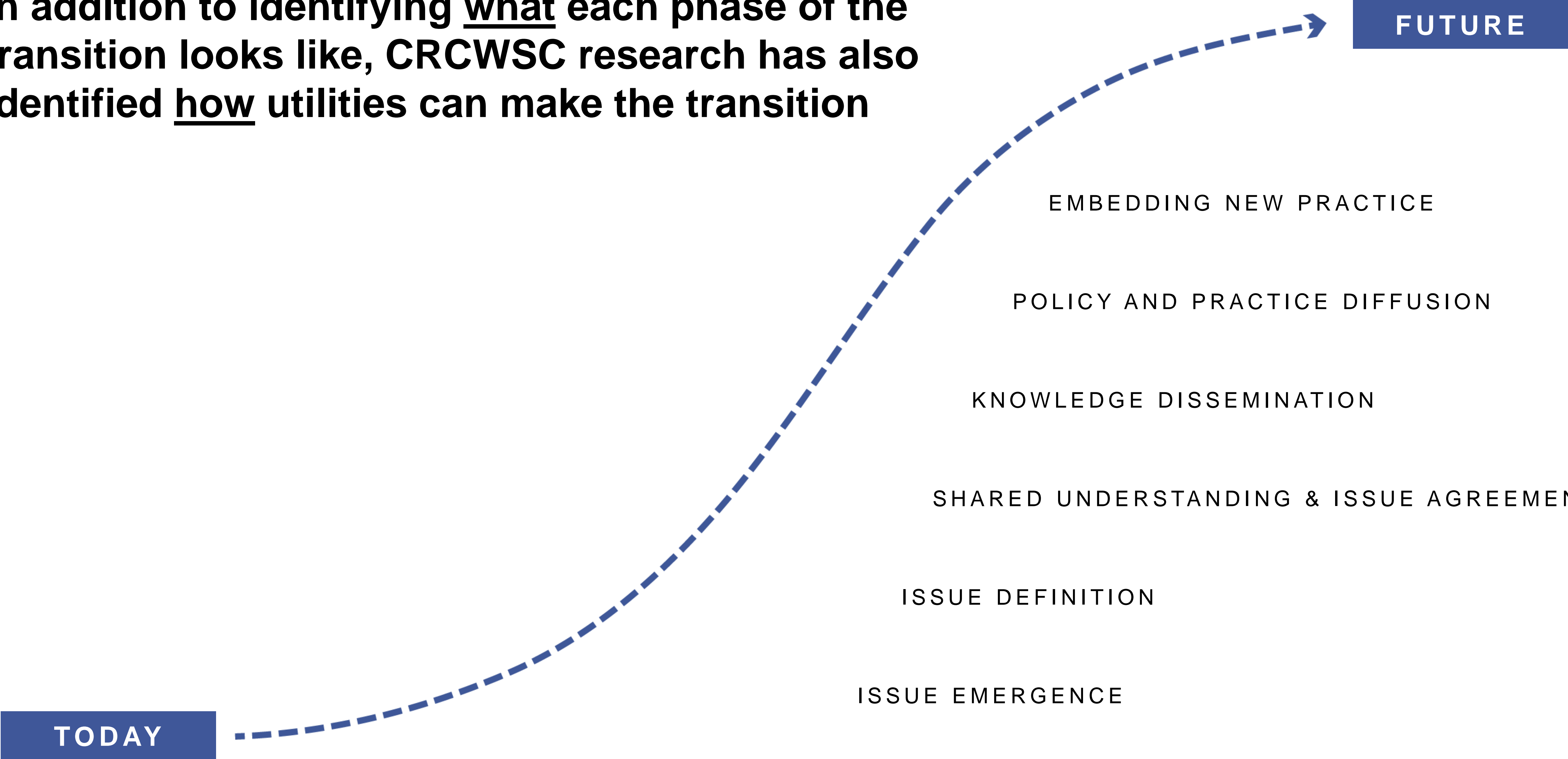
- Focus expanded to include waterway health, sustainability, resilience and liveability
- The water cycle is planned as an integrated system
- Stronger focus on diversity of centralised and decentralised supply sources
- Governance is more risk based and outcome focused
- Increased partnerships with private and community sectors



- Water embedded as a critical element of city planning
- Man made and natural assets deliver value across multiple benefits
- Governance supports collaboration in long term planning as well as accountability in delivery but is agnostic to ownership
- Community is water literate and empowered



In addition to identifying what each phase of the transition looks like, CRCWSC research has also identified how utilities can make the transition



CRCWSC Research shows there is a lot utilities can do internally, externally in partnership with others and to influence their authorising environment

TODAY

FUTURE

ISSUE EMERGENCE

ISSUE DEFINITION

SHARED UNDERSTANDING & ISSUE AGREEMENT

KNOWLEDGE DISSEMINATION

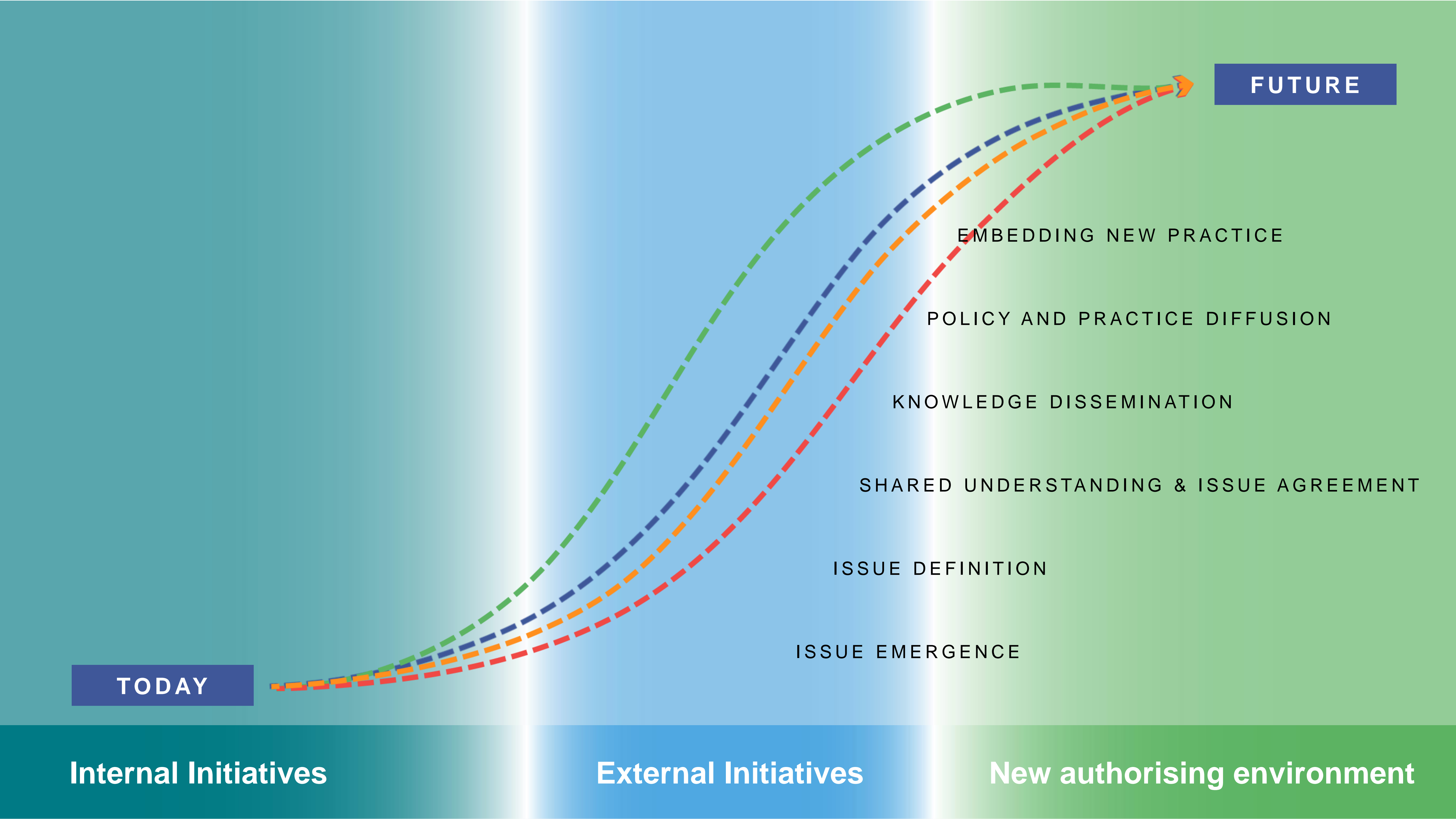
POLICY AND PRACTICE DIFFUSION

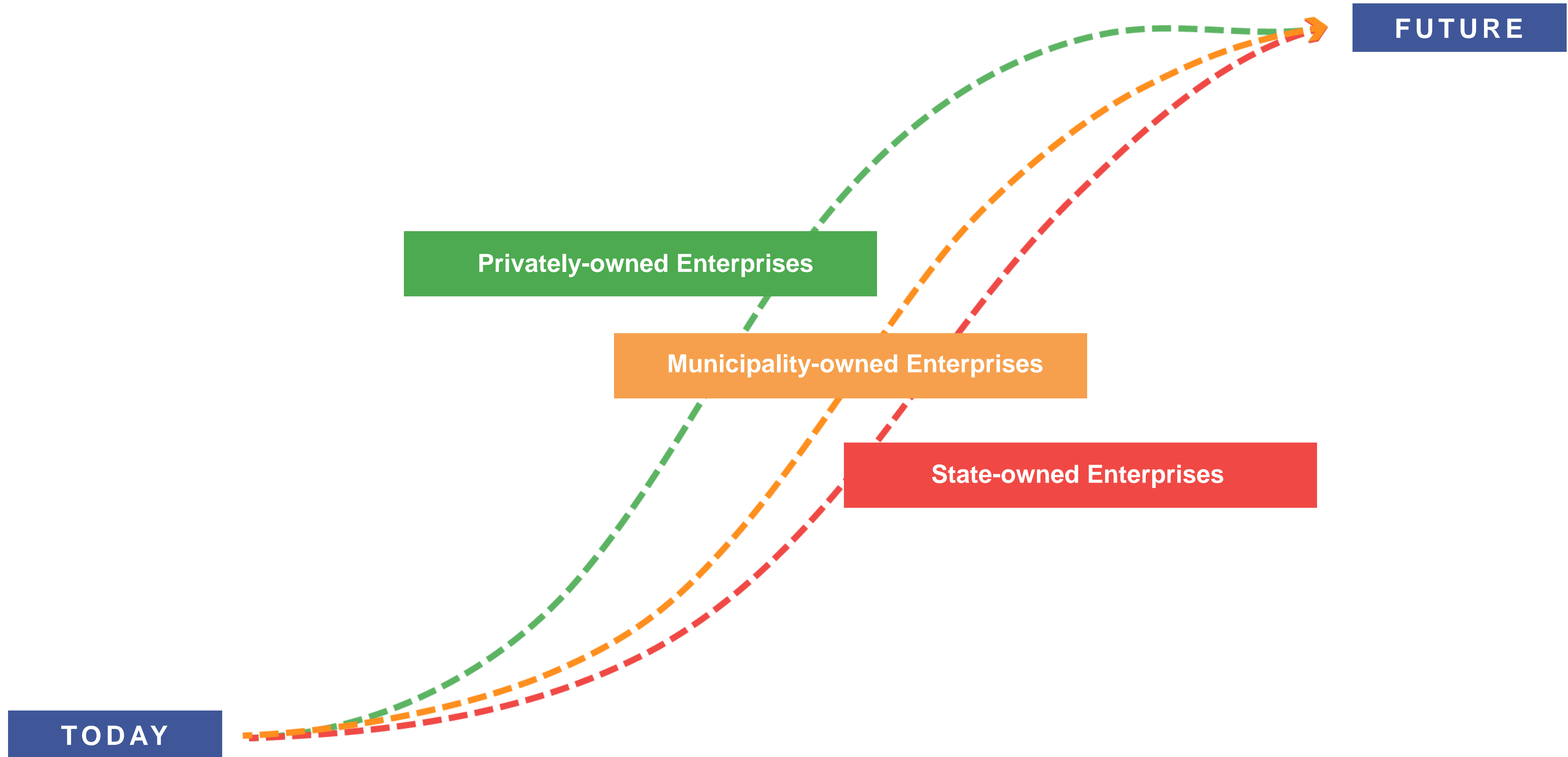
EMBEDDING NEW PRACTICE

Internal Initiatives

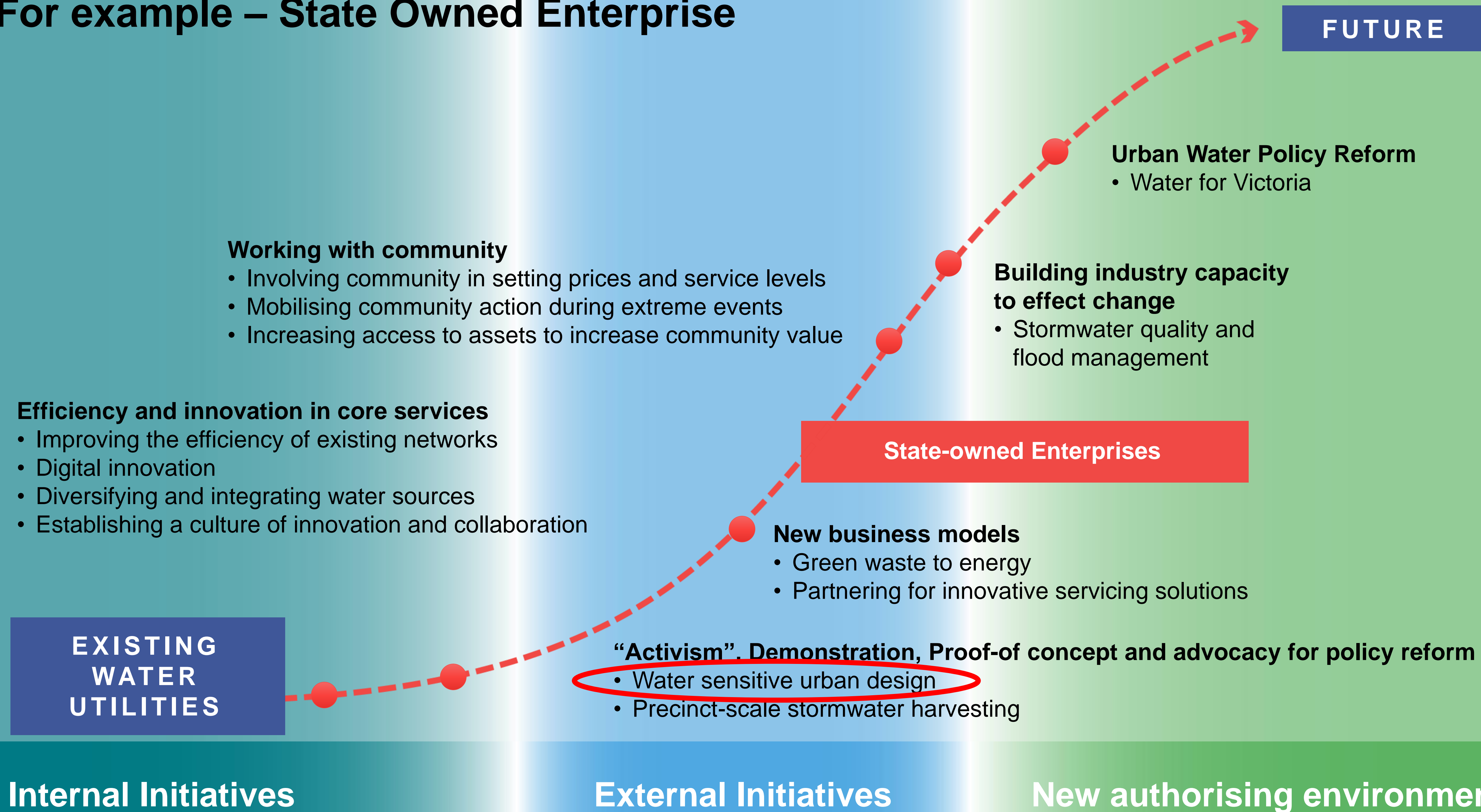
External Initiatives

New authorising environment





For example – State Owned Enterprise



Case study – Water Sensitive Urban Design in Melbourne: Activism, Investment, Influence

EXISTING
WATER
UTILITIES

1980s Issue
emergence

1996 Bay study
provides scientific
consensus on the
problem

~2000 Lynbrook Estate
demonstration of
new practice

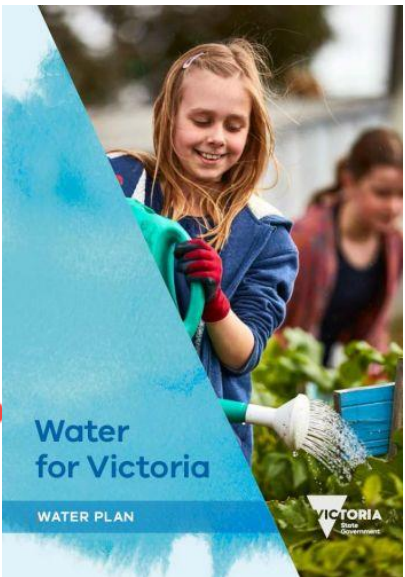
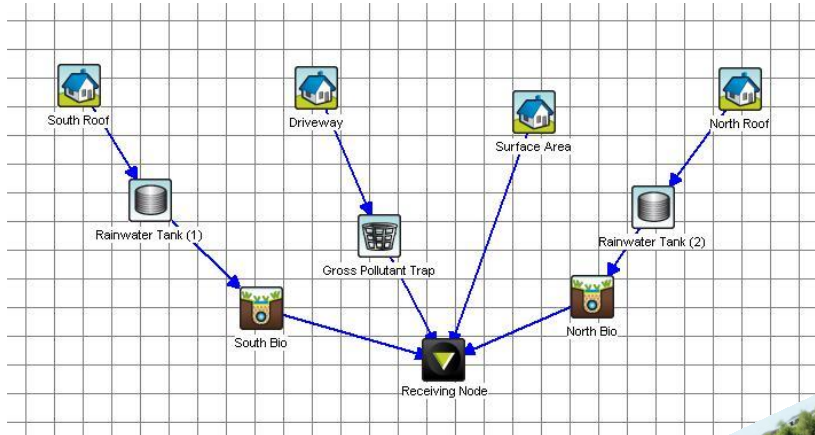
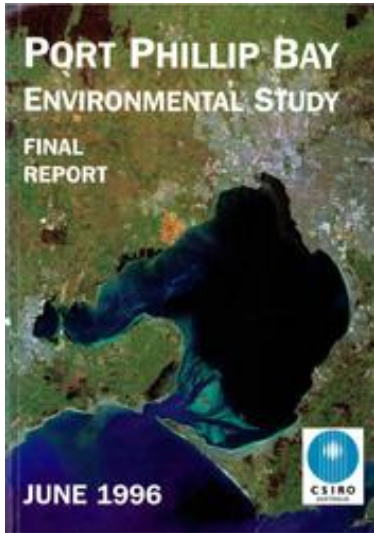
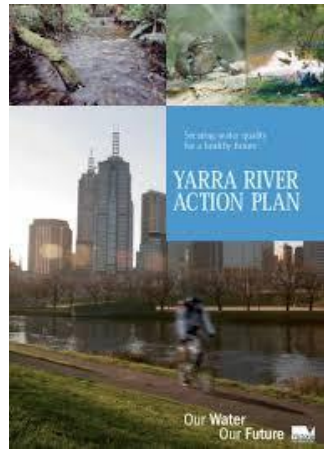
2002 Building
industry capacity

2006
\$600M state
govt investment
in Yarra River

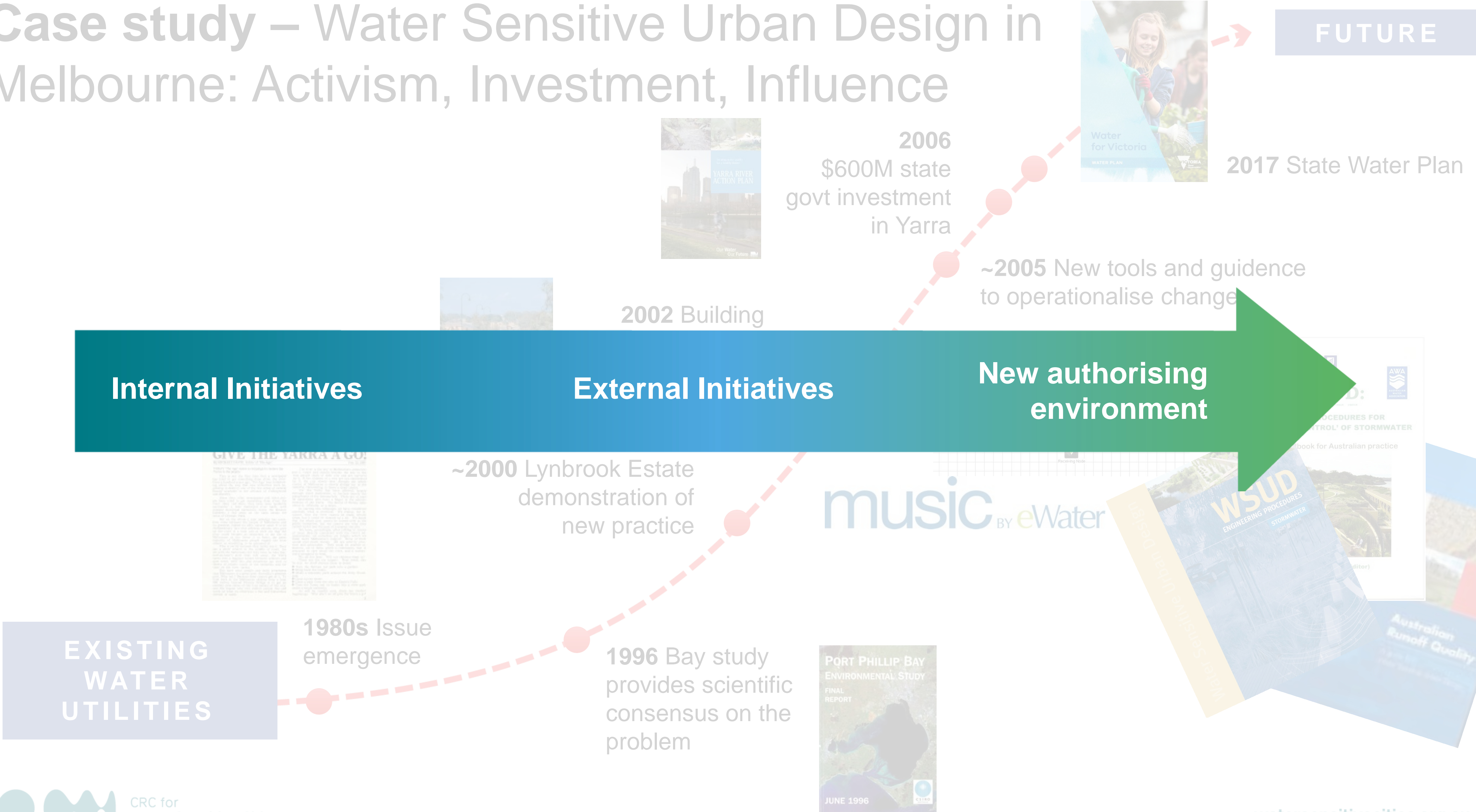
~2005 New tools and guidance
to operationalise change

2017 State Water Plan

FUTURE



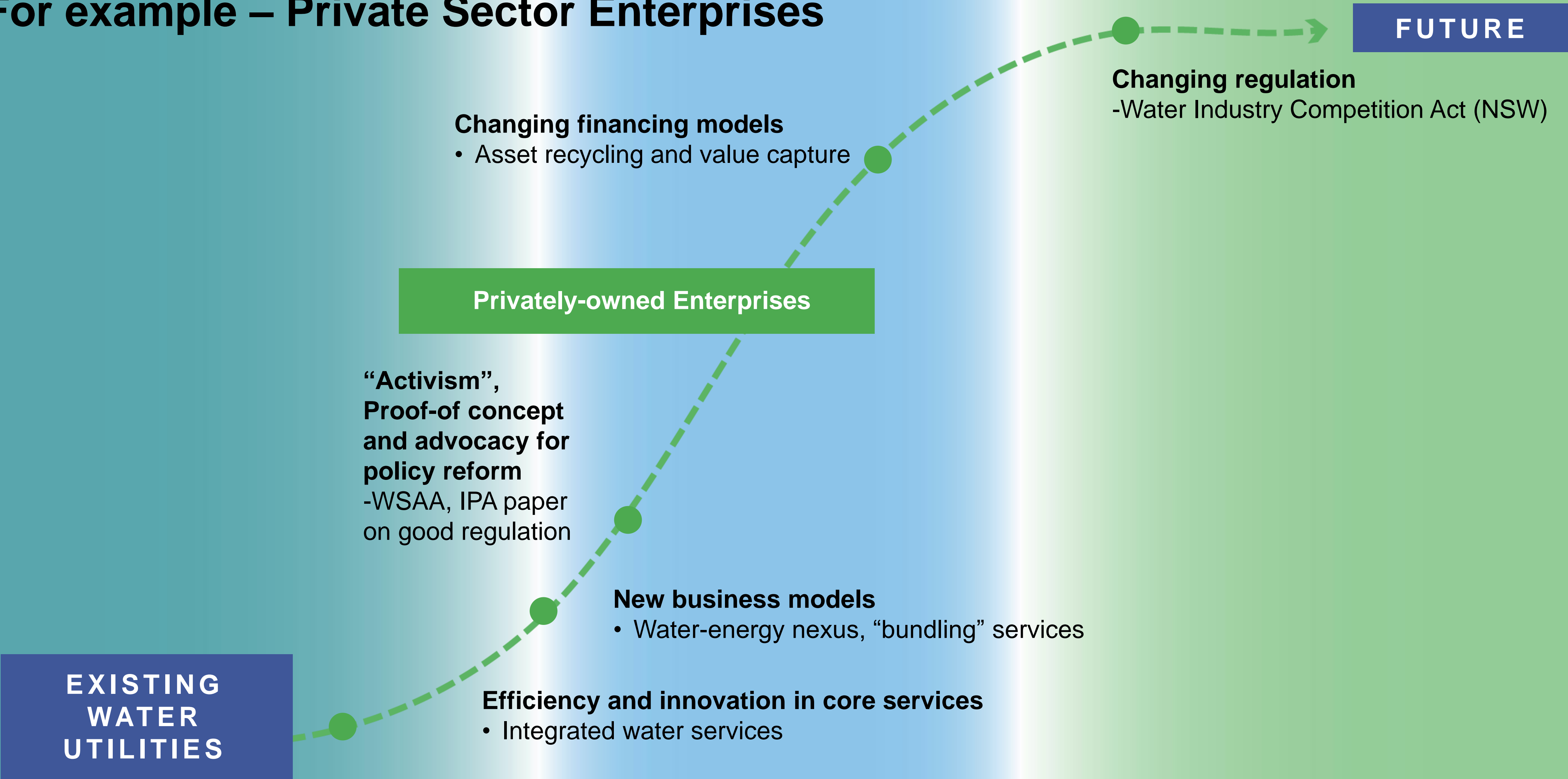
Case study – Water Sensitive Urban Design in Melbourne: Activism, Investment, Influence



For example – Municipally Owned Enterprises



For example – Private Sector Enterprises

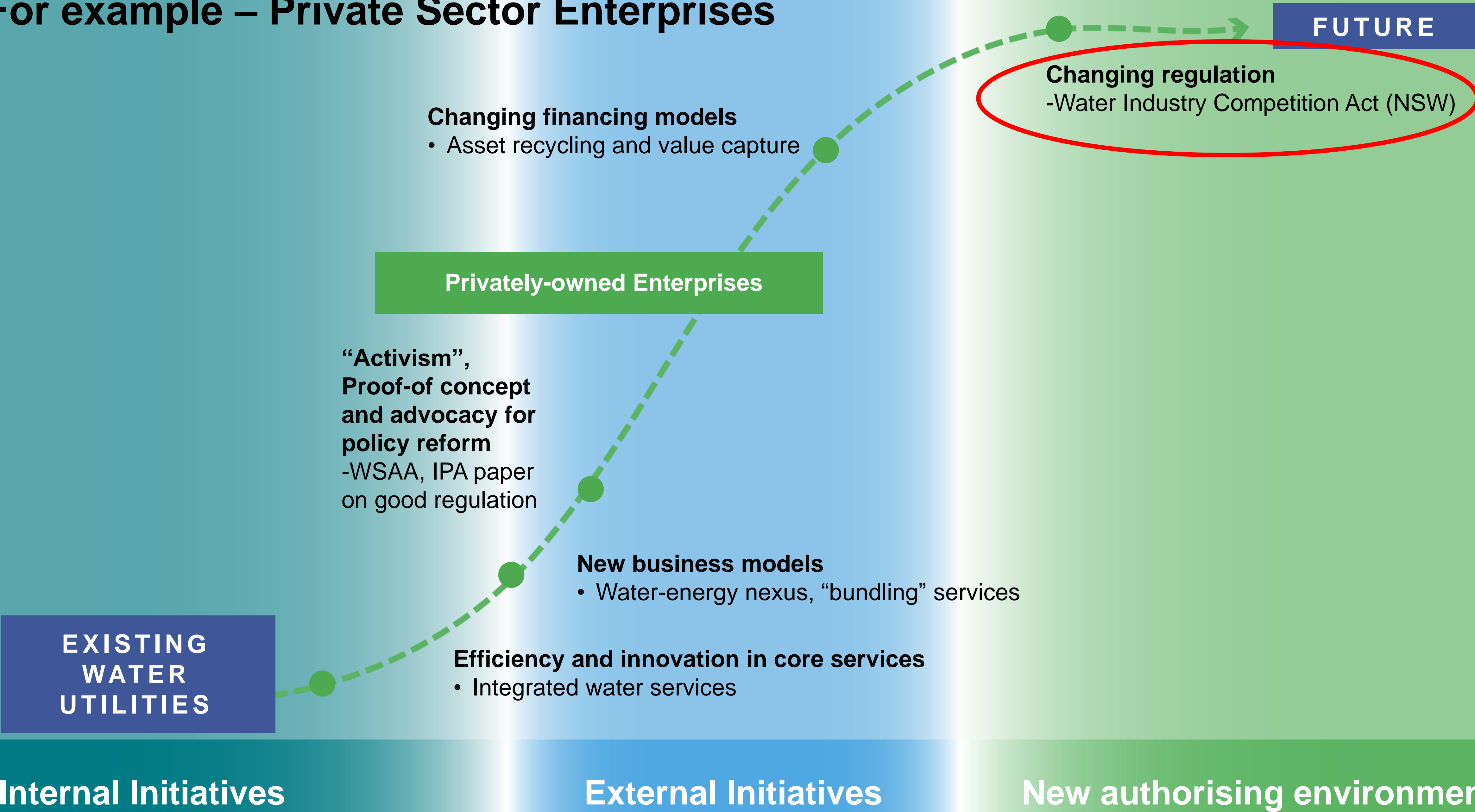


Internal Initiatives

External Initiatives

New authorising environment

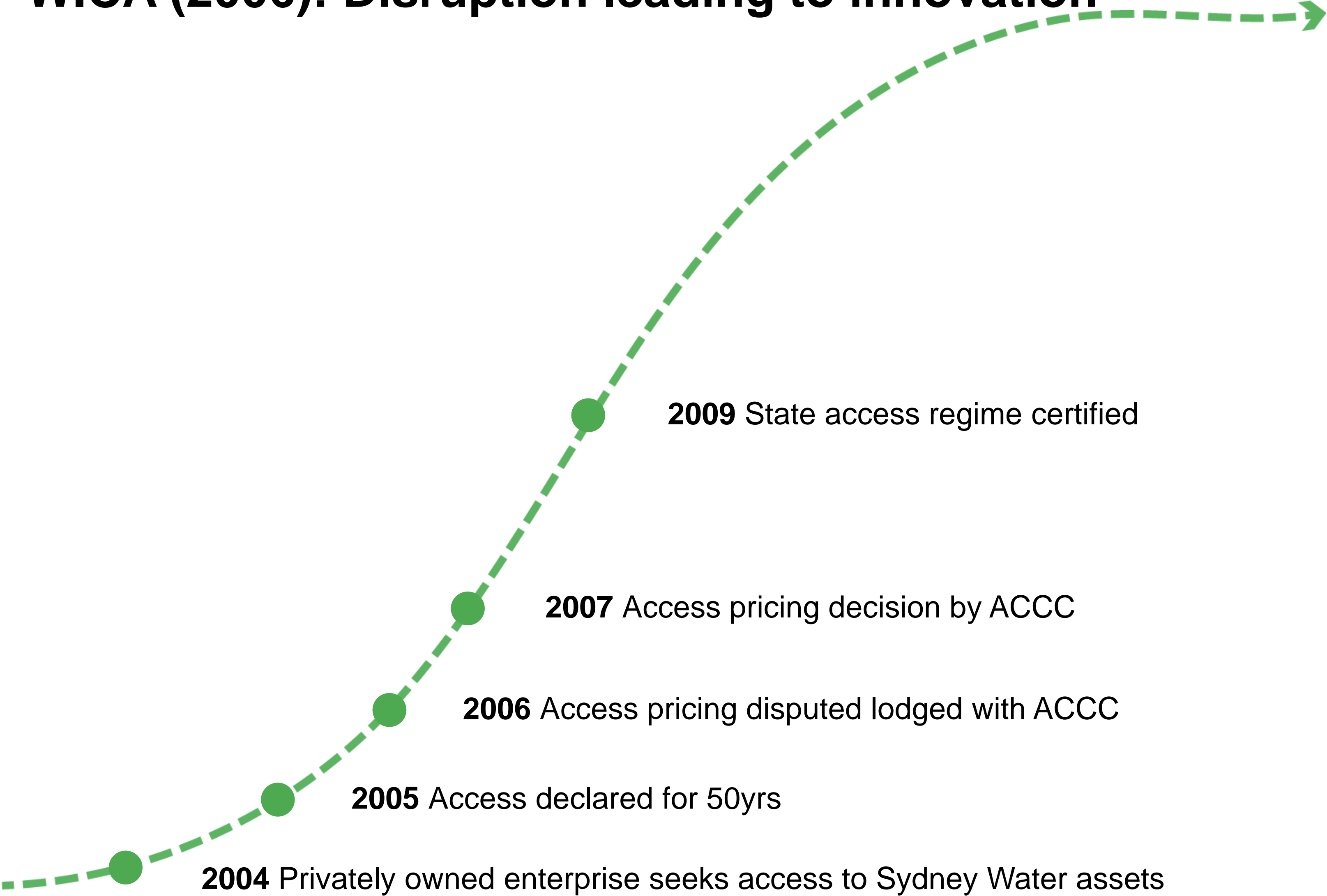
For example – Private Sector Enterprises



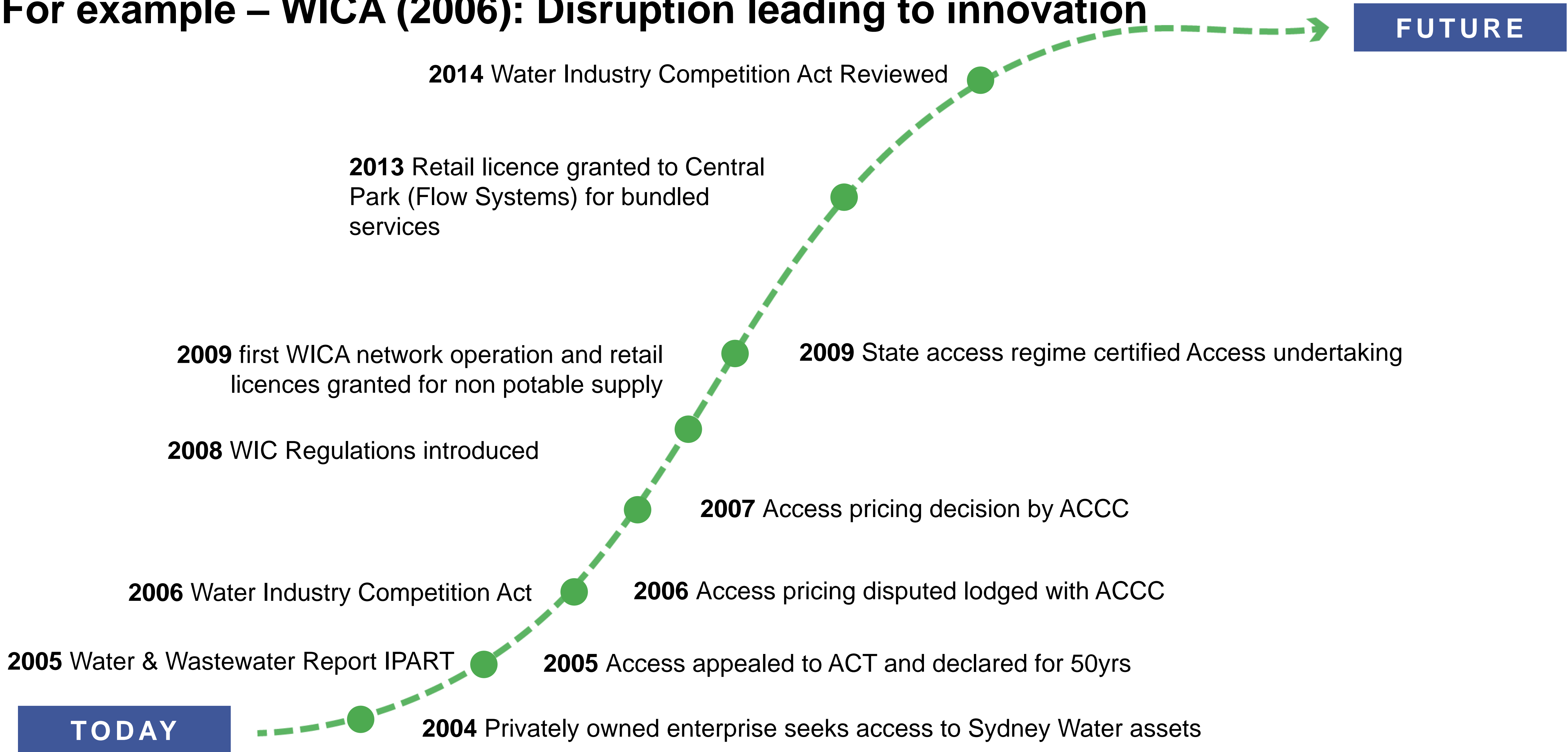
For example – WICA (2006): Disruption leading to innovation

FUTURE

TODAY

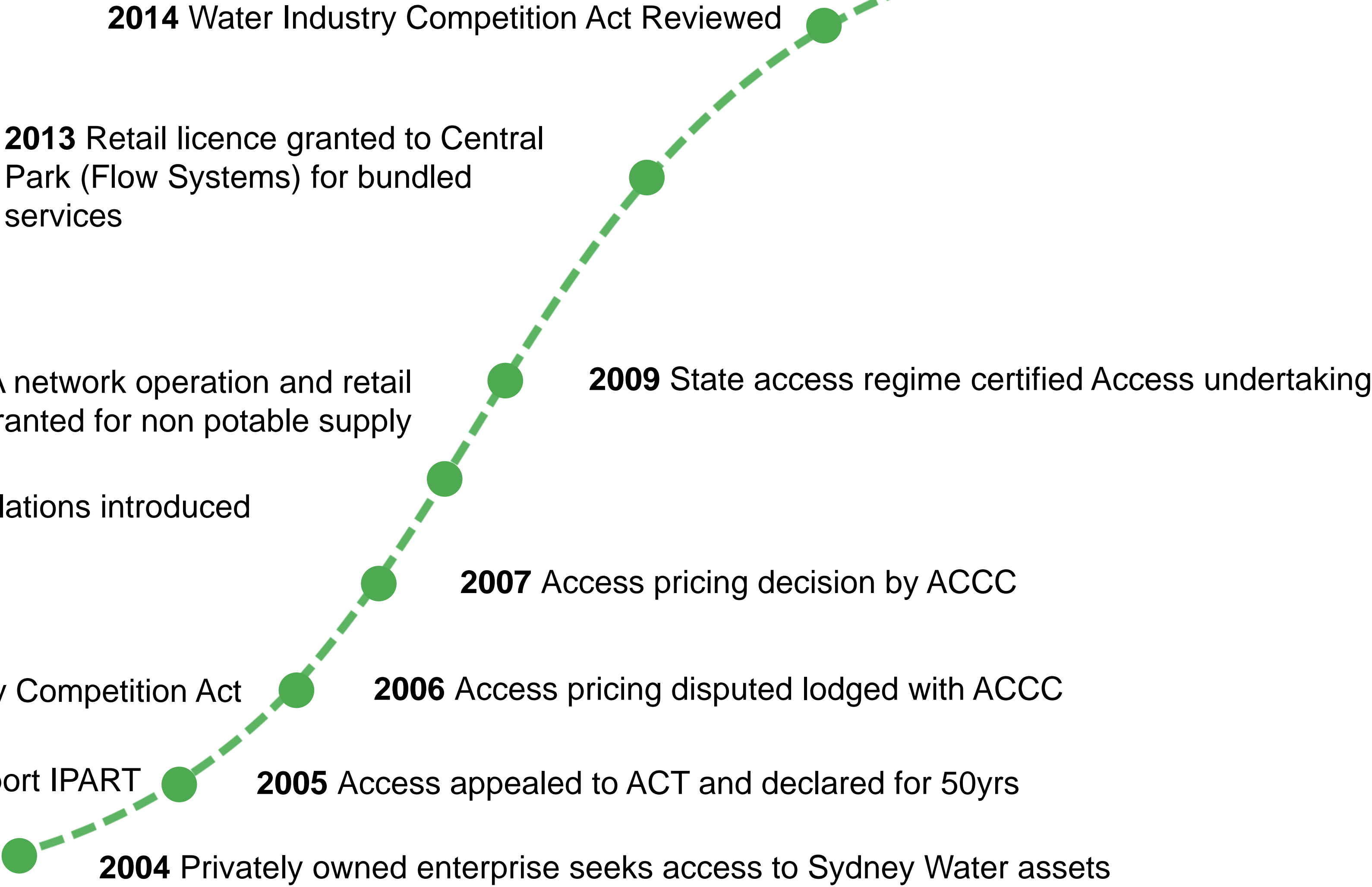


For example – WICA (2006): Disruption leading to innovation



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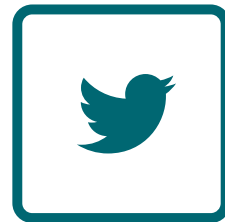


TODAY



In summary

- The need for action is clear
- There is a lot water utilities can do now to start the transition
- While the transition pathways vary, and action is required on multiple fronts there are many examples of water utilities providing a leadership role by:
 - Transforming their businesses
 - Building new partnership with others
 - Supporting change in their broader policy and regulatory environment



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Find out more about us and
download our research.

Thank you.



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